

REPORT DOCUMENTATION PAGE*Form Approved*
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Service, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.

PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE (DD-MM-YYYY)		2. REPORT TYPE Master of Military Studies Research Paper		3. DATES COVERED (From - To) SEPTEMBER 2009 - MARCH 2010	
4. TITLE AND SUBTITLE How can the Deactivation of the Marine Prowler Community Best Serve the Marine Corps?				5a. CONTRACT NUMBER N/A	
				5b. GRANT NUMBER N/A	
				5c. PROGRAM ELEMENT NUMBER N/A	
6. AUTHOR(S) Major Robert A. Steele				5d. PROJECT NUMBER N/A	
				5e. TASK NUMBER N/A	
				5f. WORK UNIT NUMBER N/A	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) USMC Command and Staff College Marine Corps University 2076 South Street Quantico, VA 22134-5068				8. PERFORMING ORGANIZATION REPORT NUMBER N/A	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A				10. SPONSOR/MONITOR'S ACRONYM(S) N/A	
				11. SPONSORING/MONITORING AGENCY REPORT NUMBER N/A	
12. DISTRIBUTION AVAILABILITY STATEMENT Unlimited					
13. SUPPLEMENTARY NOTES N/A					
14. ABSTRACT This paper serves as one proposal for how the Marine Corps can utilize the entire community of highly qualified and experienced Prowler aviators while affording other aviation occupational specialties a chance to become healthy again after eight long years of war have eroded their corporate knowledge, experience, and manpower.					
15. SUBJECT TERMS UAS FOS, JOINT STRIKE FIGHTER COMMUNITY					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UU	18. NUMBER OF PAGES 29	19a. NAME OF RESPONSIBLE PERSON Marine Corps University / Command and Staff College
a. REPORT Unclass	b. ABSTRACT Unclass	c. THIS PAGE Unclass			19b. TELEPHONE NUMBER (Include area code) (703) 784-3330 (Admin Office)

United States Marine Corps
Command and Staff College
Marine Corps University
2076 South Street
Marine Corps Combat Development Command
Quantico, Virginia 22134-5068

MASTER OF MILITARY STUDIES

How Can the Deactivation of the Marine Prowler Community Best Serve the Marine Corps?

AUTHOR:

Major Robert A. Steele
United States Marine Corps
AY 09-10

Mentor and Oral Defense Committee Member: Dr. John W. Gordon

Approved:

Date:

Oral Defense Committee Member: Dr. Rebecca S. Johnson

Approved:

Date:

01/09/10

Table Of Contents

EXECUTIVE SUMMARY	i
DISCLAIMER	ii
ACKNOWLEDGMENTS	iii
MMS	iv
BIBLIOGRAPHY	v

Executive Summary

Title: How Can the Deactivation of the Marine Prowler Community Best Serve the Marine Corps?

Author: Major Robert Steele, United States Marine Corps

Thesis: A proposal for how the Marine Corps can utilize an entire community of highly qualified and experienced Prowler Officers during the community's deactivation and transition process while affording other aviation occupational specialties a chance to become trained and MOS proficient after eight long years of war have eroded their corporate knowledge, experience, and manpower.

Discussion: Technological advancements have better armed the Marine Corps for conducting operations in the 21st Century. The development of the F-35 Joint Strike Fighter and the expansion of the Unmanned Aerial Systems Family coupled with the completion of the 202K Plus Up Plan bring with them a need for training while still succeeding in the war at hand. As in the past, when technological advancements are made, antiquated systems are retired from service and these new next generation platforms or advanced pieces of warfighting gear take their place. With the deadline set for Marine Prowler squadron deactivations, in FY16, the question becomes what does the Marine Corps do with an entire community of highly qualified Officers in order to afford other aviation occupational specialties a chance to become healthy again after eight long years of war have eroded their corporate knowledge, experience, and manpower.

Conclusion: Training the Marine Corps' total force while accomplishing the successful fighting of the war at hand is crucial. By using the Prowler community to the maximum extent possible to fill Individual Augment billets, FAC billets, ETT billets, and MEF staff billets, other aviation communities will have the ability to train, get healthy, and prosper.

DISCLAIMER

THE OPINIONS AND CONCLUSIONS EXPRESSED HEREIN ARE THOSE OF THE INDIVIDUAL STUDENT AUTHOR AND DO NOT NECESSARILY REPRESENT THE VIEWS OF EITHER THE MARINE CORPS COMMAND AND STAFF COLLEGE OR ANY OTHER GOVERNMENTAL AGENCY. REFERENCES TO THIS STUDY SHOULD INCLUDE THE FOREGOING STATEMENT.

QUOTATION FROM, ABSTRACTION FROM, OR REPRODUCTION OF ALL OR ANY PART OF THIS DOCUMENT IS PERMITTED PROVIDED PROPER ACKNOWLEDGEMENT IS MADE.

ACKNOWLEDGMENTS

I would like to thank the previous Commanding Officers that I have served under that advised me while attending school, the Marines at Manpower that aided me in my research efforts, and the academic staff at the Marine Corps University for guiding me in my actions and teaching me as I progressed not only with this paper but throughout the entire academic year. With their guidance and help I have achieved the level of knowledge necessary to excel in all my future endeavors.

The Marine Corps is making preparations for conducting operations as the 21st century continues as a stronger, more expeditionary fighting force. Through the development of Enhanced Company Operations, Sea Basing, over-the-horizon assault tactics and techniques, and the accomplishment of the 202K Plus Up Plan, the Marine Corps stands poised as a force in readiness able to enforce National Policy around the globe. Technological advancements have armed the Marine Corps for battling potential adversaries as the Global War on Terror continues to rage. As in the past, when technological advancements are made, antiquated systems are retired from service and next generation platforms or advanced pieces of warfighting gear take their place. Aircraft like the F-4 Phantom and the A-6 Intruder are prime examples of systems that once ruled the skies and then became obsolete due to advancements in technology and the costs associated with maintaining these older platforms. A new horizon is upon the Marine Corps and it brings with it the end of the EA-6B Prowler community. The development of advanced ground based jamming systems like Duke, coupled with the introduction of the EA-18G Growler and the F-35 Joint Strike Fighter, mark the end of the Prowler's long and illustrious service history for the Marine Corps. These new highly advanced systems are cheaper, more versatile, and easier to maintain. They will serve the Marine Corps well and save millions of dollars as Marine Prowlers begin their deactivations starting in FY16. In just six short years the Marine Prowlers, which have served in combat actions all around the world, will begin standing down and taking their place in history. With the deadline set for squadron deactivations the question becomes what to do with an entire community of aviators that have no platform to fly. This paper serves as a proposal for how the Marine Corps can utilize the entire community of highly qualified and experienced Prowler aviators while affording other aviation occupational

specialties a chance to become healthy again after eight long years of war have eroded their corporate knowledge, experience, and manpower.

Since the Iraq and Afghanistan wars began, every community throughout the Marine Corps has been taxed extensively when answering the call to support multiple combat deployments, Marine Expeditionary Unit rotations, and Individual Augment billets around the world. The duration of the Iraq and Afghanistan wars however, has taken its toll on every community. Many Military Occupational Specialties (MOS) have entire generations of warfighters that only know one aspect of combat, Counter Insurgency Operations (COIN), and the training required to support that type of warfare. The Commandant of the Marine Corps has recognized that over the past eight years the Marine Corps not only lost manpower due to the long war but also the experience and knowledge that once bridged the gap between its senior and most junior ranks. In 2008 a survey conducted by the Training and Education Command (TECOM) created a data base designed to verify that the subject information being taught in the school house had not fallen behind operational requirements. The questions covered all subjects from Military Occupational Specialty questions and combat deployment experiences to Marine Expeditionary Unit operational experiences.

Shortly after this survey training requirements received greater emphasis and redirection. Across the board communities were deploying, conducting combat operations, returning home and going right back to work on accomplishing community specific Mission Essential Task List (METLs) preparations for the next deployment. The dwell time became so short for some communities that it became a balancing act to accomplish required normal MOS training and pre-deployment training simultaneously. Dwell time was such an issue that the Marine Corps issued an order for a new category of administrative absence named Post- Deployment

Mobilization Respite Absence (PDMRA). This leave program was established to recognize Marines who were required to deploy/mobilize with less than the established rotation policy goals of 1:2/1:5¹. The order states that if a Marine deploys before the deployment-dwell ratio (1:2) is achieved then that Marine will earn PDMRA leave based on the length of the subsequent deployment if the minimum qualifiers have been met². This compensation is in addition to the regular and combat leave earned throughout the year.

This shorter time between deployments began to affect training evidenced by the number of units requesting waivers for not completing pre-deployment training requirements prior to their next deployment. Waivers for training were requested and granted by higher headquarters out of necessity in order to meet operational commitments around the world. Once this was recognized as a negative trend, measures were taken to immediately counter the lack of training not being accomplished. Waivers for not being 100% complete with pre-deployment training were no longer granted. Firing range schedules were extended so that ranges remained open to include weekends to ensure that Marines, organic and nonorganic to installations, were able to meet the basic requirements for weapons firing. The Marine Corps went further by issuing an order requiring all Lieutenant Colonels and below to conduct familiarization fire using the new M4/A4 Carbines issued as the replacement weapon for the M-16A2³. Finally, Desert Talon exercises which were designed as training for conducting COIN operations in Iraq were altered and expanded so that now they are similar to the Combined Arms Exercises of the past. These are just a few examples of the steps that were taken to get “back to our roots” and reestablish the Marine Corps as a light, austere, lethal expeditionary fighting force with corporate knowledge at all levels.

General James T. Conway, the Commandant of the Marine Corps, initiated a plan in 2008 that was designed to increase the overall strength of the Marine Corps to 202,000 (202K) Marines⁴. This initiative infused critical resources to a stressed operating force, increased the number of operational units available to the warfighter, and created transitional structure to continue the FY09 portion of the transition strategy⁵. Since most occupational fields have long training schedules this aggressive pace of growth presents significant manpower management challenges⁶. It requires a number of years to grow and mature the inventories of personnel properly with regard to rank-mix and specific MOSs⁷. With the 202K Plus Up Plan complete two years ahead of schedule, tight MOS inventories present challenges to staffing at all levels and locations across the Marine Corps⁸. The task is understood by all, but the road to accomplishing that task is not clear. Every Marine in their respective MOS must be technically and tactically proficient while still fighting and succeeding in the war at hand. By using the Prowler community's officers to fill battle rosters, Embedded Transition Team billets (ETT), and Forward Air Controller (FAC) billets during squadron deactivation periods other aviation occupational specialties will maintain their resident knowledge for an extended period of time ensuring training and MOS proficiency exist at all levels ahead of schedule for the 21st Century.

The policy of the Marine Corps is to limit the number of PCS moves to those required to achieve and maintain combat readiness and to ensure equitable treatment and career development of individual Marines⁹. Compliance with this policy improves combat readiness by controlling turnover, reducing travel costs, and increasing the stability of Marine families¹⁰.

Monitors make assignments based on the following priorities and in this order; Needs of the Marine Corps, MOS/billet variety (command versus staff tour), availability of the individual, Overseas Control Date (OCD), seniority, and finally individual preference¹¹. Taken into account

for assignments is Time On Station (TOS). TOS requirements are established to stabilize the movement of Marines and their dependents, and to reduce PCS costs¹². When all other factors are equal, TOS is the primary consideration in the selection of Marines for transfer¹³. The minimum TOS requirement for all assignments within the Continental United States is 36 months¹⁴. Waivers are granted individually on a case-by-case basis by the CMC provided it is determined that the Marine is the most qualified person available. Unless otherwise indicated, PCS transfers from a CONUS duty station are not required solely because of the passage of a stipulated period of time. In other words, while there is a minimum prescribed tour length of 36 months for most CONUS duty stations, there is no maximum tour length prescribed¹⁵. The Marine Corps may, under certain circumstances, transfer Marines within CONUS prior to completing the minimum TOS requirements¹⁶. Assignments made under this exception include unit deactivations. However, this clause does not exempt the Marine Corps from meeting “A” billet staffing requirements throughout the Marine Corps.

Per the Marine Corps’ Policy and the guidelines that the Monitors (manpower assignment directors) follow, two year PCS rotations are normally associated with any Permanent Change of Station orders issued. Although the minimum tour is normally 36 months, the Marine Corps has always maintained the authority to change this based on the needs of the Marine Corps, especially when dealing with critical occupational specialties like aviation. Aviators normally receive orders for 24 month rotations before returning to their respective communities. This cuts down on the time spent out of the cockpit and the atrophy of their unique skill sets.

The career progression of an aviation officer varies. A normal route includes a three to four year tour at a fleet squadron after Fleet Replacement Squadron training (18 months of MOS training). That is followed by a “B” billet assignment, a Forward Air Controller tour, or resident

school in order to expand the horizons of the individual and make them well rounded outside their MOS comfort zone. Then three additional years are completed with a fleet squadron prior to attending advanced school or being assigned a Joint Billet tour. Finally one more fleet tour is completed before being considered for a command billet or a senior staff tour based on individual performance. During the Prowler deactivation and personnel transition stage it is necessary to ensure that officer retention rates and endstrength meet the needs of the Marine Corps with well rounded officers of every rank. Prowler aircrew must still gain and maintain MOS credibility to ensure that they remain eligible to be tomorrow's command level leaders. Several factors involving billet assignments will need to be addressed to make sure that this happens.

Using the 2008 2D Marine Expeditionary Force (MEF) and 2D Marine Air Wing (MAW) Forward Iraq Battle Rosters as examples, there were 54 aviation billet requirements that aviators had to fill. The 2009 Afghanistan Special MAGTF battle roster was similar with 15 aviation officer requirements. The breakdown of ranks included Lieutenants through Colonels. Typically when MEFs deploy to a forward area they will mirror each other's requirements with regard to staffing billets. Keeping this in mind, it is expected that there is a requirement by each deploying MEF element for at least 54 aviation officers on these manning documents. As the war continues and possibly escalates, that number will steadily increase as forces in country are required to increase. At the same time that these manning documents need to be filled, so do the Embedded Transition Team (ETT) billets and Forward Air Controller (FAC) billets. The 2D MAW Forward Air Controller requirement for FY10 was 30 aviation officers broken down at 10 officers per Group for sourcing. The term Military Training Team (MTT) and Police Training Team (PTT) in Iraq have become Embedded Transition Teams (ETT) in Afghanistan. The 2D

MEF ETT requirements were three Marines for FY10 and expected to grow as the war continues. The requirements from the examples above total 87 billets that were filled by experienced aviators from different communities for a period of a year to 24 months. This total is twice the aircrew complement for an EA-6B squadron. The proposal is to use the aircrew from each EA-6B squadron after its deactivation to fill 50% of these billets prior to these pilots and Electronic Counter Measure Officers (ECMO) transitioning to new communities.

Before the Prowler community deactivation begins it will undergo some changes. These changes must be understood as they play a direct part in the plan being proposed. In FY11 VAQ-129, the Navy's EA-6B Fleet Replacement Squadron (FRS) at NAS Whidbey Island, Washington, is scheduled to cease aircrew training for the EA-6B Prowler. When the Navy stand down is complete in FY11 the Marine Corps will have the sole responsibility of training EA-6B aircrew¹⁷. The Navy, however, has committed to continue EA-6B Organizational Maintenance Actions (OMA) and Intermediate Maintenance Actions (IMA) training at NAS Whidbey Island for the life of the Prowler Program¹⁸. By FY12 the Navy will replace all of its EA-6B Prowlers with the more advanced follow on electronic warfare platform, the EA-18G Growler.

Right now a Prowler squadron consists of 180 Marines. Eight are pilots, twenty are Electronic Counter Measure Officers (ECMO), twenty seven are Staff Non-Commissioned Officers, and the remainder are Sergeants and below. Not every squadron will stand down at the same time. The schedule for deactivations right now is one squadron per year starting in FY16. Deactivations will be scheduled to occur shortly after that specific squadron returns from operational commitments overseas. This will not only aid in the preparation of sister squadrons still supporting operational requirements but also allow for the transfer of gear and personnel to

the remaining squadrons still in the Continental United States (CONUS) filling any existing gaps that they might have prior to their next rotation.

One contingency plan that the Marine Corps looked into was the activation of a Marine Prowler FRS at Marine Corps Air Station (MCAS) Cherry Point, North Carolina in FY12. Marine Corps Bulletin 5400 (MCBUL 5400 VMAQ Reorganization) issued in February of 2009 broke down the specific guidelines for the Marine FRS activation with an associated timeline. Outlined in this Bulletin was a reorganization of the existing squadrons and available Prowler manpower at Cherry Point. Instead of having four operational squadrons supporting deployments, there would be three operational squadrons and an FRS. The FRS activation would be used to facilitate the production of any remaining pilots and ECMOs needed to support Prowler operations until the end of its service life in 2019. At this time the financial constraints associated with standing up the FRS at Cherry Point have caused the bulletin to be rescinded until an undetermined date in the future.

Normally there are two reasons to deactivate a Marine organization. Either the Troop and Organization Program Document has changed and the unit is no longer required or in response to a world situation requiring immediate activation of additional FMF organizations, which in turn necessitate the deactivation of in-being FMF organizations¹⁹. The Prowler communities deactivation falls into the second category. There is a systematic standard operating procedure for accomplishing any organization's deactivation²⁰. The deactivation process is not complex by any means and in truth is just the reversal of the activation phase. The general program phases and utilization of coordinating procedural documents are issued by Headquarters Marine Corps (HQMC) and executed within 60 days of issue²¹. There are four basic phases that are required to be accomplished: the planning phase, directing phase, managing

phase, and termination phase. As the saying goes “the Devil is in the Details” and so the planning phase is most crucial. During this phase the manpower, logistical, and overall administrative plan for the deactivation of the organization will be addressed in detail. The Directing and Managing phases will be the execution of the plan established by HQMC. Finally termination will be complete when all the deactivation objectives have been completed and the deactivation commander reports to the CMC stating that all objectives have been achieved.

All four FMF Prowler squadrons should be included during the planning phase. Based on reversing the activation requirements the aircraft, tools, and support equipment are redistributed to fill any gaps that sister squadrons might have. Any remaining aircraft are delivered to Davis Motham Air Base, or equivalent air base, for storage while excess tools and equipment are turned over to the Marine Aviation Logistics Squadron for sourcing shortages at different operating bases in CONUS and around the world. Finally the disposition of aircrew and maintainers is addressed. Any shortages that sister squadrons have is first filled using the deactivating squadron as the source for filling those shortages. The remaining personnel are issued their follow on orders based on the needs of the Marine Corps.

The FRS activation at Cherry Point, although helpful in the short term by creating an avenue that would not tax the existing EA-6B aircrew extensively, does not address the need for a follow on plan for life after the Prowler. Regardless of an FRS activation, the end of the service life for the Prowler will remain 2019 and not having an FRS for aircrew training at Cherry Point will not sway the Navy from ceasing EA-6B Prowler training at VAQ 129. Without the FRS activation the current number of existing Prowler pilots and ECMOs throughout the Marine Corps will suffice from FY12 to FY16 when the first squadron begins deactivation if existing experienced Prowler aircrew are utilized to the max extent possible. By

not standing up an FRS, the Marine Corps can use the funding originally being set aside for the FRS to establish an Unmanned Aerial Systems PMOS school for Officers by FY11. The establishment of this school now will not only aid in the further development and expansion of the UAV community but also the transition of EA-6B ECMOs once squadron deactivations begin.

Headquarters Marine Corps has already begun looking into follow on MOS transitional training for EA-6B aircrew that provides flexibility and professional opportunities²². The plan as it stands right now will include pilot transitions to new platforms, increased ECMO to pilot transitions for those that qualify, and alignment of the electronic warfare and mission systems expertise in the ECMO community with emerging requirements in the Unmanned Aerial Systems (UAS) Family of Systems (FoS) and the F-35B program²³.

There are currently three unmanned aircraft squadrons (VMUs) established in the Marine Corps with a fourth squadron being established in 2013. Based on the Table of Organization required to fill the ranks of these squadrons, EA-6B ECMOs can transition and fill eight of fourteen squadron officer billets immediately. With the expansion of the UAV community to include more aircraft, future Table of Organization requirements will increase accordingly.

A study done by the Center for Naval Analysis for the Deputy Commandant, Aviation, focused on manning alternatives for unmanned aerial systems (UASs)²⁴. The data for the study represented 72XX and 75XX Lieutenants through Lieutenant Colonels that had previously been assigned to the VMU community. Among officers, no occupational community had a vested interest in the VMUs²⁵. The knowledge and skills gained during their tour with the squadrons was consistently lost due to a lack of multiple tours with the VMU community²⁶. As a result of not conducting multiple tours, none of the occupational specialties meet the draft joint training

standards for access to the national air space and the conduct of joint missions²⁷. Additionally this high turnover rate has resulted in recurring costs associated with training officers and staff. Therefore the Center for Naval Analysis recommendation was that a UAS PMOS for officers be established.

Right now the Army is providing all of the Marine Corps' Unmanned Aerial Commander (UAC) school training for operating UAVs. The Marine Corps is sending its 72XXs and 75XXs to the Unmanned Aircraft Commander course (UAC) at Fort Huachuca, Arizona then providing the remaining required UAC skills through on-the-job training²⁸. With the creation of a new UAC PMOS for officers the Marine Corps will be able to define the training and skill sets required to be a UAC. Currently the established Unmanned Aircraft Commander FMOS (7315) has three basic requirements. First, the UAC must have air vehicle mission planning and execution skills²⁹. Second, the UAC must be familiar with the various fire adjustment techniques to accurately spot for different fire delivery platforms³⁰. Third, the UAC must have communications skills and knowledge including fire support procedures; report procedures; formats for intelligence, logistics, and administrative reports; and understand airspace coordination with the DASC/TAOC/TACC/FSS, etc³¹. Based on the fact that the UAS requirements listed above are already aligned with the skill sets that EA-6B ECMOs maintain, ECMOs are able to transition rapidly to the new UAC PMOS once it is established and easily fill the rank requirements of this new community. The decision for establishing the UAC PMOS is set for June of 2010³². That will ensure that the dedicated MOS is submitted for the September 2010 MOS manual deadline³³.

The F-35 Joint Strike Fighter (JSF) program development is rapidly progressing. The JSF is the Marine Corps' follow on replacement for the FA-18, AV-8B, and EA-6B fighter

aircraft. The priorities right now for manpower in the F-35B community are staffing for the developmental test program at Patuxent River, the Operational Test program at Edwards AFB, and the Joint Integrated Training Center (JITC) at Eglin AFB³⁴. Manpower requirements have been programmed to support a ready-for-training date of 1 October 2010³⁵. Planned squadron transitions to the F-35B begin in FY12³⁶. Aviation selected the first JSF commander (for VMFAT-501) during the FY09 Command Screening Board and in CY09 will convene an F-35B transition board to select the initial cadre of instructor pilots from the F/A-18, AV-8 and EA-6B communities. During this transition, the Marine Corps will support JSF introduction and will continue to support of the legacy platforms that aircraft is replacing. Tables of Organization have been established to begin the building of the first two F-35B squadrons, VMFA-212 and VMFA-332³⁷. With the training pipeline established well ahead of the deactivation schedule for EA-6Bs, pilots will have no problem transitioning and progressing professionally as F-35 pilots. Discussion has also been made at the utilization of some EA-6B ECMOs as mission planners for this new platform based on their experience and knowledge. This will enable the JSF mission planning process with regard to tactics and employment to develop at the rate needed for future operations.

This is where the needs of the Marine Corps outweigh the needs of the individual. With the stand up of the JSF, completion of the 202K Plus Up Plan, expansion of the VMU community, and the deactivation of the Prowler community every aviation MOS must capitalize on the time, knowledge, and experience that each community has on hand to train its organic individuals in preparation for 21st century warfare. Discussed earlier was the need and emphasis for training since most occupational fields have such a long training curriculum and the massive influx of personnel will require that time to become technically and tactically proficient. The

EA-6B pilots and ECMOs will provide a wealth of knowledge and experience to the new communities that they get assigned to after their EA-6B community deactivation occurs. Until then pilots and ECMOs that are not assigned to fill gaps in their respective sister squadrons' ranks during the deactivation process will be prime candidates to fill battle rosters for deploying MEFs, ETT billets, and FAC tour billets prior to transitioning to a new occupational specialty.

The use of Prowler aircrew to fill battle rosters, ETTs, and FAC billets will ensure that the resident corporate knowledge for other aviation occupational specialties remains intact for an extended period of time without pulling personnel to source extraneous outside assignments. This enables those occupational specialties the ability to maintain the maximum amount of resident knowledge and experience pertaining to their MOS while the most junior of Marines in their field receives in-depth training. It creates an opportunity for senior ranks to mentor the mid-level ranks and in turn the mid-level ranks to impart their knowledge and experience to the junior ranks. This is where the Prowler community deactivation and transition will pay dividends for the Marine Corps.

Additionally, instead of any 36 month tours being assigned, all EA-6B aircrew "B" billets rotations can be reduced to 24 month tours since they meet the requirement as a critical occupational specialty. At the end of the 24 month period Prowler aircrew can rotate back through their community, maintaining a steady state flow of experience until FY16 when the first Prowler squadron stands down. Currently throughout the Marine Corps, including those in the fleet, there are 86 Prowler pilots and 188 Prowler ECMOs. Using these individuals in this manner will allow a constant rotation of experienced Prowler manpower to be accessible for supporting operational requirements until FY19 while still affording them as individuals an opportunity to become well rounded officers and receive credit for the "B" billet tours.

The cost to train a pilot is substantial. All pilot candidates must complete basic flight training, lasting 1 to 2 years, to earn their wings. Latest Department of Defense Figures indicate that to train each military pilot through basic flight training is about \$1 million³⁸. To fully train a pilot with the requisite operational experience can be more than \$9 million. These costs will vary depending on the type of aircraft³⁹.

Based on the amount of money and time invested by the Marine Corps for these individuals to become pilots, some should be afforded the opportunity to immediately transition into the training pipeline for a follow on platform, namely the J-35. It costs less money to transition a known qualified pilot with flight experience from one platform to another than growing a new pilot from ground zero. Furthermore it is easier and faster for an experienced pilot to re-gain qualifications (mission commander, division lead, section lead) on their follow on platform over a brand new pilot who is gaining their qualifications for the first time. By transitioning existing pilots to the JSF all of the manpower requirements for filling 13 operational squadrons by 2019 will easily be met ahead of schedule.

Those pilots that are senior Captains (3 years in grade) at the time of their respective squadrons' deactivation should immediately transition into the F-35 pipeline. Once complete with the FRS training a three year fleet tour will suffice in order to build MOS credibility and serve as time for regaining platform specific qualifications and experience. At the completion of that three year tour they should be Majors and should split into one of three groups. One group should attend resident Intermediate Level School (ILS), one group should be assigned as Regimental Air Officers, and the other group assigned "B" billet tours. Assignments based on the "thirds" system ensure a quality spread continues to exist. At the completion of their assigned tours a three year follow on fleet tour should be required in order for them to maintain

eligibility for command and flow experience back into the F-35 community. From there these officers can pick up with normal MOS progression.

Those pilots that are junior Captains (2 years time in grade and below) at the time of their respective squadrons' deactivation are split into two groups and assigned Forward Air Controller (FAC) tours and resident EWS school seats. Once complete with their respective one year school assignment or their 18 month FAC tour these officers can be flowed into the F-35 pipeline for transition. After the FRS training is complete, a follow on three year fleet tour will allow these officers to gain MOS credibility and time to regain platform specific qualifications. At the completion of their first fleet tour these officers, as with senior pilots from their previous community, get split into three groups. They then get assigned resident Intermediate Level School (ILS), MEF Staff tours, and Regimental Air Officer tours. Assignments based on the "thirds" system ensure a quality spread continues to exist. At the completion of the one year school assignment or a 24 month "B" Billet tour, a three year fleet tour should be required in order for them to maintain eligibility for command and flow experience back into the F-35 community. From there these officers can pick up with normal MOS progression.

Those pilots that are Majors (3 years time in grade and below) at the time of their respective squadrons' deactivation should immediately transition into the F-35 pipeline. Once complete with the FRS training a three year fleet tour (max) should suffice to build MOS credibility and serve as the time required for regaining platform specific qualifications. At the completion of a three year tour they should split into one of two groups based on performance. Those that are more senior (4 year Majors time in grade/ "LtCols" and "LtCol selects") should attend Top Level School or conduct a mandatory Joint Billet Tour based on the "thirds" system. Of this group, those that completed resident ILS should be assigned to the School of Advanced

Warfighting (SAW) for further education and to benefit the Marine Corps by replenishing the 6053 ranks. Those that are junior Majors (less than 4 years time in grade) should conduct Regimental Air Officer tours and Individual Augment Billet tours. This breakdown of experience and knowledge will maintain a quality spread for the Marine Corps while still maintaining the individuals' eligibility for command. From there they should have normal MOS progression.

Those pilots that are senior Majors (4 years time in grade and above) and those that have been passed over for Lieutenant Colonel should transition into the F-35 community as Mission Planners in order to capitalize on their wealth of experience in the development of the JSF mission planning process. Once a three year tour is complete they should be assigned to higher headquarters staff positions until retirement.

Those pilots that are Lieutenant Colonels (and "LtCol selects") should not transition to a follow on platform. By this time they have been commanders or maintain the resident knowledge necessary to become commanders. These individuals should split into one of two groups based on performance and allowed to attend Top Level School or be assigned immediately to Higher Headquarters staff positions. Typically the experience and knowledge maintained by these Lieutenant Colonels best serves the Marine Corps on higher level staffs and in joint billets advising and directing. Additionally there are ample command opportunities available that are not platform specific that they can fill and succeed greatly in. Examples would include Marine Wing Headquarters Squadrons, Headquarters and Headquarters Squadrons, Marine Wing Support Squadrons, etc.

Electronic Counter Measure Officers are the "meat and potatoes" of this proposal due to their numbers. Keep in mind that they too cost \$1 million to train initially and their flight

experience, knowledge, and qualifications should be capitalized on by their follow on community. Especially since the UAS community projected Mission Essential Tasks Lists are being developed in the direction of Offensive Air Support and Electronic Warfare.

The ECMOs that are senior Captains (4 years in grade) at the time of their respective squadrons' deactivation should split up into one of three groups and be assigned Individual Augment billets, 18 month Forward Air Controller tours, and 18 month Embedded Transition Team billets. Once complete with their assigned tours they can begin to transition into the UAC PMOS training. This gap in transition time will allow for the UAC PMOS School to become well established and the UAC Program of Instruction solidified. They should then complete a three year fleet tour in order to build MOS credibility and gain experience employing their new weapons system. At the completion of that three year tour they should be mid-grade Majors and should split into one of three groups based on the "thirds" system. One group should attend resident Intermediate Level School (ILS), one group assigned as Regimental Air Officer tours, and the other group assigned "B" billet tours. Another three year fleet tour should then be completed in order to stay eligible for command in their new community. Of those attending ILS, 10% should be assigned to the School of Advanced Warfighting (SAW) to replenish the 6053 ranks prior to returning to the fleet. From there they should pick up with normal MOS progression.

Those ECMOs that are junior Captains (3 years time in grade and below) at the time of their respective squadrons' deactivation should be split up into two groups and assigned either Individual Augment billets or 18 month FAC tours. Once complete with their respective 24 month IA or 18 month FAC tour these officers can be flowed into the UAC PMOS training. After the completion of school they should then complete a three year fleet tour in order to build

MOS credibility and gain experience employing their new weapons system. At the completion of that three year tour they should be Majors and can attend resident Intermediate Level School (ILS) or conduct a "B" billet tour. Following the assignments above they should conduct another mandatory fleet tour in order to stay eligible for command and flow experience back into the expanding UAS community. From there they should have normal MOS progression.

Those ECMOs that are Majors (3 years time in grade and below) at the time of their respective squadrons' deactivation should be immediately transitioned into the VMU community. Once complete with the UAC PMOS school training they should complete a three year fleet tour in order to build MOS credibility and gain experience employing their new weapons system and impart the knowledge and experience that they already maintain into the VMU community. At the completion of that three year tour they should be split into two groups based on seniority. Those that are more senior should attend Top Level School or conduct a mandatory Joint Billet Tour. Those that are still junior Majors by this time (3 years or less time in grade) should conduct Regimental Air Officer tours, fill Individual Augment Billets, or attend resident ILS. Those that attend ILS should then be assigned to the School of Advanced Warfighting (SAW) for further education and to benefit the Marine Corps by replenishing its 6053 ranks. This breakdown of experience and knowledge will again maintain that quality spread for the Marine Corps while still maintaining the individual's eligibility for command. From there they should have normal MOS progression.

Those ECMOs that are senior Majors (4 years time in grade and above) and those that have been passed over for Lieutenant Colonel should be transitioned into the F-35 community as Mission Planners in order to capitalize on their knowledge and experience in the development of

the JSF mission planning process. Once a three year tour is complete they should be assigned higher headquarters staff positions until retirement.

Those that are Lieutenant Colonels (or "LtCol selects) should not be transitioned to a follow on platform. By this time they have been commanders or maintain the resident knowledge necessary to become commanders. They should be allowed to attend Top Level School or be assigned immediately to Higher Headquarters staff positions. Typically the experience and knowledge maintained by these Lieutenant Colonels best serves the Marine Corps on higher level staffs and in joint billets advising and directing. Additionally there are ample command opportunities available that are not platform specific that they can fill and succeed greatly in. Examples would include Marine Wing Headquarters Squadrons, Headquarters and Headquarters Squadrons, Marine Wing Support Squadrons, etc.

Those EA-6B pilots and ECMOs that are currently filling "B" Billets, Individual Augment Billets, Regimental Air Officer Tours, and other assignments will be needed in their community prior to the community sundown in order to augment the process outlined above. Unfortunately the Navy FRS will be closed for refresher training at the time of their return. Therefore in order for these individuals to be part of the solution that is addressed by this paper they will need a refresh to be conducted at the squadron prior to being a fully qualified again. This is not a problem. With the amount of MAWTS Weapons and Tactics Instructors (WTIs) that the EA-6B community currently maintains each squadron can have a dedicated refresh syllabus as part of their T&R manual which is taught and supervised by the squadron Naval Aviation Training Operating Procedures and Standardization (NATOPS) Officer and Department Of Safety and Standardization (DSS) Officer. This refresh course curriculum, obtained from the Navy at VAQ 129, can be monitored by the MAWTS qualified WTIs within each squadron and

signed off respectively. With the increase in aircraft for each individual squadron due to the Navy's sundown of EA-6Bs there can be dedicated squadron aircraft solely for refresh accomplishment. Therefore these individuals will only have to move once prior to accomplishing the refresh syllabus and re-qualifying for squadron service.

This suggested course of action for using the Prowler community as outlined above can begin in FY12. The F-35 pipeline will be established, instructor cadre selected and trained, and the FRS ready to train students by October of 2010 and the UAS community will have established the UAC PMOS with dedicated school training by 2011. The EA-6B community contributions to these two new communities should begin as early as 2011. Of the 162 EA-6B aircrew that are currently filling billets outside of a flying squadron, 10% (16 Marines) should begin being filtered into these two follow on communities at the end of their current tours. The remaining 90% should filter back through the fleet at the completion of their respective tours to execute the plan outlined above. This will allow those who have been in the squadrons for the past three years time to rotate and continue to become well rounded officers by executing 24 month "B" billets, Individual Augment billets, 18 month FAC tours, and resident school assignments. Each year after FY11, 10% of EA-6B aircrew that are returning from IA billets, school assignments, FAC tours, etc. should be filtered into the transition pipeline until FY16 when the squadrons begin deactivating. At that time EA-6B aircrew should cover 50% of individual augment billets while deactivations and transitions are accomplished simultaneously. Until then the emphasis for EA-6B aircrew assignments outside of their primary MOS should be MEF staff IAs, FAC tours, ETT billets, and resident schools. These assignments can be accomplished in the maximum 24 month rotation window discussed earlier.

This transition plan will ensure that the Prowler community begins its transition path now in order to relieve a large UAS and F-35 community influx in 2016 and so other aviation occupational specialties receive some relief in order to train their respective influx of Marines. Beginning in FY11 the 10% being transitioned should include those pilots that are transitioning to become F-35 pilot instructors. The ECMOs utilized in this first FY11 transition should be those who have been out of their MOS for over three years. This will allow those with the most recent flight experience and qualifications to return to the fleet. After FY11 no EA-6B aircrew should fill billets greater than 24 months ensuring minimal time out of the cockpit.

Keeping the quality spread premise in mind, the goal of increased health and training requirements for other aviation occupational specialties, and the need to train the 202K Plus Up Marines the Prowler community could easily fill 10% of these required billets until sundown begins and after deactivations begin they could fill 50% of these required billets as each individual squadron deactivates. Using the aircrew in this manner will keep these billets filled for the minimum required periods, provide continuity during turnover, and meet transitional timelines and pipeline goals for the UAS and JSF communities.

The Marine Corps in facing the 21st Century head is adjusting its force in readiness accordingly. The sundown of the Prowler community brings with it the enhancement and expansion of UAS community and the infusion of experience into the F-35 community. The training of the Marine Corps' total force, while accomplishing the successful fighting of the war at hand, is crucial. By using the Prowler community to the max extent possible to fill Individual Augment billets, FAC billets, ETT billets, and MEF staff billets, other aviation communities will have the ability to get healthy and prosper. It will tax those that have been taxed before but for the greater good of the Marine Corps. With the deadline set for the Prowler's deactivation the

question of what to do with an entire community of aviators that have no platform to fly has a suggested answer. The Marine Corps can use this entire community of highly qualified Marine Corps Officers to erase eight long years of war erosion and restore corporate knowledge and experience to its other aviation occupational specialties while preparing for the 21st Century.

-
- ¹ Marine Corps, MARADMIN 448/07, p.1
- ² Marine Corps, MARADMIN 448/07, p.1
- ³ Marine Corps, MARADMIN 566/06, p.1
- ⁴ Marine Corps, The FY2009 Marine Aviation Plan, p.3-2
- ⁵ Marine Corps, The FY2009 Marine Aviation Plan, p.3-6
- ⁶ Marine Corps, The FY2009 Marine Aviation Plan, p.3-6
- ⁷ Marine Corps, The FY2009 Marine Aviation Plan, p.3-6
- ⁸ Marine Corps, The FY2009 Marine Aviation Plan, p.3-6
- ⁹ Marine Corps, The Marine Corps Personnel Assignment Policy MCO P1300.8R, p.1100 1-3
- ¹⁰ Marine Corps, The Marine Corps Personnel Assignment Policy MCO P1300.8R, p.1100 1-3
- ¹¹ Marine Corps, The Marine Corps Personnel Assignment Policy MCO P1300.8R, p.1106 1-10
- ¹² Marine Corps, The Marine Corps Personnel Assignment Policy MCO P1300.8R, p.1101 1-4
- ¹³ Marine Corps, The Marine Corps Personnel Assignment Policy MCO P1300.8R, p.1101 1-4
- ¹⁴ Marine Corps, The Marine Corps Personnel Assignment Policy MCO P1300.8R, p.1101 1-4
- ¹⁵ Marine Corps, The Marine Corps Personnel Assignment Policy MCO P1300.8R, p.1101 1-4
- ¹⁶ Marine Corps, The Marine Corps Personnel Assignment Policy MCO P1300.8R, p.1101 1-4
- ¹⁷ Marine Corps, The FY2009 Marine Aviation Plan, p.3-6
- ¹⁸ Marine Corps, The FY2009 Marine Aviation Plan, p.3-6
- ¹⁹ Marine Corps, HQMC SOP For The Activation, Deactivation, and Redesignation of FMF and non-FMF air and ground organizations, p.21
- ²⁰ Marine Corps, HQMC SOP For The Activation, Deactivation, and Redesignation of FMF and non-FMF air and ground organizations, p.22
- ²¹ Marine Corps, HQMC SOP For The Activation, Deactivation, and Redesignation of FMF and non-FMF air and ground organizations, p.23
- ²² Marine Corps, The FY2009 Marine Aviation Plan, p.3-6
- ²³ Marine Corps, The FY2009 Marine Aviation Plan, p.3-6
- ²⁴ MANEUVERS, Manpower Alternatives For Unmanned Aerial Systems, p. 1
- ²⁵ MANEUVERS, Manpower Alternatives For Unmanned Aerial Systems, p. 1
- ²⁶ MANEUVERS, Manpower Alternatives For Unmanned Aerial Systems, p. 1
- ²⁷ MANEUVERS, Manpower Alternatives For Unmanned Aerial Systems, p. 1
- ²⁸ MANEUVERS, Manpower Alternatives For Unmanned Aerial Systems, p. 2
- ²⁹ Marine Corps, MOS Manual MCO 1200.17A, p. 1141 1-173
- ³⁰ Marine Corps, MOS Manual MCO 1200.17A, p. 1141 1-173
- ³¹ Marine Corps, MOS Manual MCO 1200.17A, p. 1141 1-173
- ³² Marine Corps, CNA UAS Manpower Study Out Brief and UAS PMOS Decision Brief, p. 15
- ³³ Marine Corps, CNA UAS Manpower Study Out Brief and UAS PMOS Decision Brief, p. 15
- ³⁴ Marine Corps, The FY2009 Marine Aviation Plan, p.3-8
- ³⁵ Marine Corps, The FY2009 Marine Aviation Plan, p.3-8
- ³⁶ Marine Corps, The FY2009 Marine Aviation Plan, p.3-8
- ³⁷ Marine Corps, The FY2009 Marine Aviation Plan, p.3-8
- ³⁸ United States General Accounting Office, Military Personnel: Actions Needed To Better Define Pilot Requirements And Promote Retention, p. 3
- ³⁹ United States General Accounting Office, Military Personnel: Actions Needed To Better Define Pilot Requirements And Promote Retention, p. 3

BIBLIOGRAPHY

Marine Corps. "Post Deployment/Mobilization Respite Absence (PDMRA) MARADMIN 448/07." Washington DC: HQ, USMC 2007

Marine Corps. "The FY2009 Marine Corps Aviation Plan." Washington DC: HQ, USMC 2008

Miller, Richard. "Manpower Alternatives For Unmanned Aerial Systems." Maneuvers Center For Naval Analysis Washington DC: HQ, USMC June/July 2009

Marine Corps. "MOS Manual MCO 1200.17A." Washington DC: HQ, USMC June 2009

Marine Corps. "Marine Corps Personnel Assignment Policy MCO P1300.8R." Washington DC: HQ, USMC October 1994

Marine Corps. "CNA UAS Manpower Study Out Brief and UAS PMOS Decision Brief." Washington DC: HQ, USMC 2009

Marine Corps. WEBMASS. Microsoft 2000

Marine Corps. MCTFS. Microsoft 2000

"Squadron Retirement." Wings of Gold 1994: Vol 19. pp. 8-9

Jenkins, Jim. "Rorke Takes Command of VX-23." NAS Patuxant River Public Affairs. 05 Feb 2003

Fein, Geoff. "UAVs Could Have Potential Electronic Attack Role for Marine Corps." Helicopter News. 11 July 2006

Marine Corps Historical Center, History and Museums Division, U.S. Marine Corps. Marine Fighter Attack Squadron 121 Stand Down Bulletin

Marine Corps. MARADMIN 566/06. Washington DC: HQ, USMC 2008